

Capstone Project	Faculty Advisor(s) Department	Faculty Advisor	Company Name
Conboy Lab One-on-One Lab Internship	BIOE	Irina Conboy	
Developing an alternative to antibiotics	BIOE	Seung-Wuk Lee	NLYTN Beauty
Fletcher Lab One-on-One Lab Internship	BIOE	Daniel Fletcher	
Herr Lab One-on-One Lab Internship	BIOE	Amy Herr	
In Vivo T-cell Tracking with MPI to Optimize Cancer Immunotherapy	BIOE	Steven Conolly (BioE/EECS) and Lawrence Fong, MD (UCSF)	
Liepmann Lab One-on-One Lab Internship	BIOE	Dorian Liepmann	
Microfluidics for single cell analysis	BIOE	Aaron Streets	
MPI for Rapid Presurgical Planning of Gastrointestinal Bleeds	BIOE	Steven Conolly, Henry VanBrocklin	
Murthy Lab One-on-One Lab Internship	BIOE	Niren Murthy	
Advanced Technologies for Complete Streets	CEE	Alexander Skabardonis	San Francisco Metropolitan Transportation Authority (SFMTA)
Benefits of Satellite Navigation to US Airports using Ground Based Augmentation System (GBAS)	CEE	Jasenska Rakas	
City-Wide Real-Time Water Quality Monitoring: the PAX SmartSystem(TM) Technology Team A	CEE	David Sedlak	PAX Water Technologies, Inc.
City-Wide Real-Time Water Quality Monitoring: the PAX SmartSystem(TM) Technology Team B	CEE	David Sedlak	PAX Water Technologies, Inc.
Estimation of population and traffic density metrics using machine learning techniques	CEE	Alexey Pozdnukhov	Facebook
Managing Traffic Congestion in Travel Corridors: The Role of Connected and Automated Vehicles	CEE	Alexander Skabardonis	System Metrics Group
What will happen when the government loses control of mobility?	CEE	Alexandre Bayen	Department of Energy, LBNL
Controls for Assistive Robots	EECS	Anca Dragan	
Extended Platform for Android tele-monitoring	EECS	Ruzena Bajcsy	
Modern High-Speed Link Design	EECS	Vladimir Stojanovic	
Scaling up Deep Learning on Clusters	EECS	John Canny	
Simulating Spectrum Access Systems	EECS	Anant Sahai	
Understanding Deep Learning through Visualization	EECS	John Canny	

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User Interface and Data Visualization for Environmental Assessment	EECS	Bjoern Hartmann	
Vision Correcting Displays	EECS	Brian Barsky	
Automated Disambiguation of US Patent Grants and Applications by Machine Learning	IEOR	Lee Fleming	
Claims Predictors	IEOR	Lee Fleming	
Classifier Development in Machine Learning of Patent Grant Prediction	IEOR	Lee Fleming	
Commercial Lending Analytics Project	IEOR	Ilan Alder	Nomis Solutions
Create a model to quantify throughput of a clinical pathway	IEOR	Philip Kaminsky	UCSF
Data-Driven Management of Building Resources Team A	IEOR	Anil Aswani	
Data-Driven Management of Building Resources Team B	IEOR	Anil Aswani	
GridWatch	IEOR	Lee Fleming	GridWatch team (academic & private from UC Berkeley, U Michigan & IBM Labs Africa)
Machine Learning for Patent Litigation (MLPL)	IEOR	Lee Fleming	
Optimization of Surgical Clinical Pathway at UCSF Health	IEOR	Philip Kaminsky	UCSF
Patent Evaluation Team 1	IEOR	Lee Fleming	Google
Patent Evaluation Team 2	IEOR	Lee Fleming	
Predicting Bad Patents: Applying Machine Learning to Improve US Patent Accuracy	IEOR	Lee Fleming	
Prescriptive Analytics for Cyber Security	IEOR	Anil Aswani	Innvo Solutions LLC
Toolkit for VC investment	IEOR	Lee Fleming	
12-Bar Tensegrity Soft Robot for NASA Missions	ME	Alice Agogino	NASA
3-D Cryoprinting Team A	ME	Boris Rubinsky	
3-D Cryoprinting Team B	ME	Boris Rubinsky	
6-Bar Tensegrity Soft Robot for NASA Missions	ME	Alice Agogino	NASA
Adaptive Ankle Support System	ME	Tarek Zohdi	
Advanced Manufacturing Processes	ME	Tarek Zohdi	Siemens
American Jobs Project	ME	Paul Wright	American Jobs Project

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Automating Workflow from CAD to Control	ME	D. Auslander, G. Anwar	National Instruments, Autodesk
Autonomous Driving - An Open Source Platform	ME	Francesco Borrelli	
Berkeley Wave Carpet - Wave Energy Generator	ME	Reza Alam	CalWave LLC
Beyond Smartphones, emerging stretchable/flexible wearables exploration in the internet of things	ME	Alice Agogino	Samsung
Big Data and Analytics to Improve Building Energy Efficiency	ME	Van Carey	
Clear Ear Bottle	ME	Grace O'Connell	QB3 Rosenman Institute (UCSF)
Design Of A Wearable Animatronic Costume: Facial expressions	ME	Dennis Lieu	Autodesk
Design Of A Wearable Animatronic Costume: Head and Body	ME	Dennis Lieu	Autodesk
Design of New 3-D Printer Inks Team B	ME	Tarek Zohdi	Sandia Labs
Design Of Oscillating Wind Power	ME	Alice Agogino	TSF Group
Designing an MRI Safe Catheter	ME	Grace O'Connell	QB3 at UCSF and Penumbra (biotech startup in Alameda)
Diagnosing Rheumatic Heart Disease in Developing Economies	ME	Sara Beckman	Riley Lab: School of Public Health
Exploring Commercialization Of Promising Technologies	ME	Kryiakos Komvopoulos	NSF I-Corps
Fault Tolerant Control in Autonomus Driving	ME	Francesco Borrelli	Hyundai
Improved Egg Retrieval	ME	Grace O'Connell	QB3 Rosenman Institute (UCSF) and Theranova/Potrero (industry)
Improving Reliability of 3D Printed Materials in Biomedical Applications	ME	Tarek Zohdi	Sandia Labs
Lymphodema Model	ME	Grace O'Connell	QB3 Roseman Institute (UCSF) and Cenoflex innovations (industry)
Measurement And Evaluation Of "Added Drag" Of Marine Vehicles In Waves	ME	Ronald W. Yeung	Principle Power Inc.,
Mobile App For Assessing Hospital-Acquired Infections	ME	Lydia Sohn	

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Prevention of early breastfeeding cessation	ME	Grace O'Connell	QB3 Roseman Institute (UCSF) and Brilk (industry)
Solar Based Combined Electricity And Heating System	ME	Van Carey	LBNL
Street Nature Score	ME	Alice Agogino	Faludi Design
Structural Stability of Ultrathin Amorphous Carbon Films for Heat-Assisted Magnetic Recording	ME	Kryiakos Komvopoulos	Meggitt Sensing Systems
Supermaneuverable Unmanned Underwater Vehicle	ME	Reza Alam	
The ULTRA Spine, A Tensegrity Robot for Flexible Quadruped Backbones	ME	Alice Agogino	NASA Ames Research Center
Wearable Bioelectronics	ME	Kryiakos Komvopoulos	
Zenflow: Design of Implant to Relieve BPH	ME	Grace O'Connell	QB3 Rosenman Institute (UCSF) and Zenflow (Startup)
Adhesive Elastomer Patch and Delivery Device for Fetal Membrane Pre-Sealing	MSE	Phil Messersmith	UCSF
Commercializing Nanocarriers for Neurological Disease Team B	MSE	Ting Xu	Xalud!
Ion Beam Processed High-Performance Thermoelectric Materials: from Lab to Market	MSE	Junqiao Wu	
Tool and Process Design for Recycling and Remanufacturing of Li-ion Batteries	MSE	Andrew Minor	CEQ LLC
What will happen when the government loses control of mobility?	MSE	Ting Xu	Xalud!
Micro modular reactors as part of a distributed grid	NE	Massimiliano Fratoni	